



Jobs Act for Public K-12 & Higher Education Institutions

Skagit Valley College

About the Jobs Act:

The Jobs Act for Public K-12 and Higher Education Institutions was funded through the 2010 Supplemental Capital Budget – ESHB 2836 Section 1016. \$50 million was given to Commerce. Commerce awarded 77 grants totaling \$42.5 million. Skagit Valley College is located in the 10th, 39th and 40th Legislative Districts. For more information: www.commerce.wa.gov

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New lighting wins a “wow” from students, coaches, and faculty

Skagit Valley College (SVC) is a two-year community college serving Skagit, Island and San Juan counties in northwest Washington. Established in 1926, SVC grants academic transfer degrees, technical degrees and certificates. Over 6,800 undergraduates attend the college.

Situation:

SVC's Facility Director Dave Scott faced two daunting challenges. First, the college was one of the least energy efficient community colleges in the state of Washington. (Built in 1957, the college still used much of its original lighting, HVAC, and plumbing.) And second, convincing faculty, staff and even himself that changing out existing lighting to more energy efficient lighting would

not reduce the quality of light in three key campus facilities: the gym, the auto shop, and the diesel shop.

Solution:

The first project Scott undertook was to replace interior and exterior lighting in the gym as well as the auto and diesel shops.

The gym's lighting was a very old series of metal halide high bay lights strung across the ceiling, which due to magnetic ballasts “hummed”, a very loud hum. The lights took on average 10 to 15 minutes to warm up and had to be left on from early morning to late in the evening. Turning off the lights when the gym was not being used wasn't an option because of

Project Highlights:

- *Lighting upgrades at three campuses*
- *Water saving faucet aerators, low-flow toilets & new flush valves*
- *Estimated annual energy and water savings: \$34,869*





“Every dollar we save in utilities is a dollar less the public pays.”

Dave Scott

Director of Facilities & Operations

how long they took to warm up.

“You couldn’t have people standing around waiting for the lights to come on before they started their basketball game,” said Scott.

The auto and diesel shops, built in the mid 1970s and early 1980s, were also equipped with outdated lighting. The dated lighting was a series of high output fluorescent lights which are no longer manufactured.

All three of these campus facilities depend on good lighting. College students, staff, and Mt. Vernon residents can’t shoot hoops if they can’t see the basket. Student mechanics can’t repair engines if they can’t see what parts they are working on.

Before starting the lighting retrofit, Scott faced one big challenge. He had to convince not only himself, but the athletic director, the coaches, and the auto and diesel mechanic teachers that the new lighting would work. “We were all fearful because we didn’t want to change the lighting and be unhappy,” said Scott.

To convince everyone, he mocked up one area of the gym and gave tours. He also took light meter readings that showed before and after lighting levels. “Once everyone saw the lighting, it became clear that this was a good project,” he said. Scott installed high bay T-8 fluorescent lamps with electronic ballasts.

The second and much more quiet project Scott undertook was to install low-flow toilets, faucet aerators, and new flush valves. “No one is excited about low flow toilets because no one thinks about them or even notices them,” said Scott. “But it’s a significant savings.”

Results:

Scott’s lighting project brought results he never expected. “I’ve never seen a project that has such a wow factor. Students and faculty step into the gym and shops and say wow. And during the graduation ceremony, faculty and staff no longer heard the hum over the speakers.”

The new energy efficient lighting is expected to save \$23,443 annually

and the new water saving measures an additional \$11,426. In total, SVC expects to save \$34,869 annually.

By lowering their utility bills, SVC is saving enough money to pay back their state treasury loan and to return funds to the college’s general fund. “We have a positive cash flow in the first year even with the state loan,” said Scott. “In the face of future budget cuts, this money will be very helpful. It can be used for anything the college needs.”

Measures:

- **Lighting** - SVC replaced metal halide high bay, incandescent and high pressure sodium lights with T-8 lamps and electronic ballasts and compact fluorescents.
- **Water Saving** - Throughout the campus new low-flow toilets (1.6 GPF), faucet aerators (½ GPM and 1.5 GPM) and urinals (1/8 GPF) with low flush valves were installed.

Total project costs: \$666,071

Estimated annual energy and water savings: \$34,869

Grant award amount: \$302,000